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EXAMINER

ABRAMS, NEIL

ART UNIT

PAPER NUMBER

2839

DATE MAILED: 07/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/995226

Applicant(s)

Examiner

N. Abrams

Group Art Unit

2839

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- ☒ Responsive to communication(s) filed on 6-6-03
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1, 2, 4-6, 8, 10, 11, 18-22, 26-35 is/are pending in the application.
- ☐ Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1, 2, 4-6, 8, 10, 11, 18-22, 26-35 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

## Application Papers

- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some\* ☐ None of the:
  - ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other \_\_\_\_\_

Office Action Summary

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Claims 1, 2, 4-6, 8, 10, 11 and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amberg in view of Broeksteeg and Provencher, HDM and Weber.

Amberg discloses, fig. 1, coplanar circuit boards joined by mating connectors 16, 18. Amberg connectors do not include sets of wafers, a power module and a guide module. Use of wafers is taught by Broeksteeg at 60 and also at housing 40 together with modules 60 (the assembly read as a wafer). Wafers also shown by Provencher at 114 and Weber at B'C'. Use of power and guide modules are shown by Weber and by HDM. It would have been obvious to use such wafers and modules in the Amberg system at connectors 16, 18. Use of wafers and modules enables the system to be tailored as needed. The wafers, power contacts would all include right angle contacts (connectors and pins) as shown by Broeksteeg, fig. 8, 14, 16 and Provencher fig. 3A. For claim 2, Broeksteeg housings 4, are readable as "male" connector since it is fitted into a receiver, fig. 11. Also obvious to use a connector like that of Provencher at 122, read as a male (pin) connector.

For claim 5, inclusion of Broeksteeg assembly would include wafers 60 and supports 102, 102'. Claim 11, use of term "switch" for pcb does not avoid the rejection. For claim 18, voltage selection would be design matter. Claims 4, 5, 6, 8, 10, 19, 20, 21, 22, also met by such combination.

Claims 26-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Broeksteeg in view of Chen '354 Weber, HDM, Masuda, Dent and Siwinski.

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Broeksteeg discloses a system with top and bottom supports 102, 102' and wafers 60 or housing 4 with wafer 60 jointly read as wafer. Broeksteeg lacks power and guide modules and a joiner module. Weber and HDM disclose systems with power and guide modules. Siwinski at 36, 16 and Chen at 26 show parts with latches and read as joiner modules. It would have been obvious to provide Broeksteeg with such power and guide modules and for claims 33, 34, to provide such joiner modules. This would enable the assemblies to be tailored for each use and with joiner modules to be held to a mating assembly. For claims 27, 28, 30, voltage selection would be matters of obvious design producing only expected results. In addition use of low signal voltage and higher power voltage taught by Masuda and Weber and Dent. This would enable proper voltages to be applied. For claim 31, Broeksteeg system includes shields at 180. For claim 32, 34, specific terms used for pcbs do not overcome the rejection. Claim 35 feature discussed above.

Claims 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims 1, 2, 4-6, etc above, and further in view of Masuda and Dent.

Should above rejection of claim 18 be at issue, use of high power, low signal voltages also suggested by Masuda and Dent. Obvious to use this in modified Amberg to provide best suited voltages for each use.

Applicant's arguments filed with the amendment have been fully considered but they are not persuasive. As to arguments, note that claims 26-35 do not define over a perpendicular board arrangement. For claims 1, 10, 18, the Broeksteeg connectors, fig. 1 and fig. 16 are clearly


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applicable to coplanar pcbs. Clearly Weber and HDM connectors could be used with coplanar boards by bending all contacts at 90 degrees. For Amberg the suggestion to modify is found in the advantage of providing wafer connectors, modules in a manner whereby assemblies could be tailored as necessary and specially designed parts may be used.

Any inquiry concerning this communication should be directed to N. Abrams at telephone number 308-1729.

Abrams/ek

07/14/03

  
NEIL ABRAMS  
EXAMINER  
ART UNIT 322